

Scott, on desertification and land degradation in north-central China and north-western India, respectively, round up this volume.

Although somewhat overwhelmed by the sheer range of topics, I enjoyed reading this comprehensive collection of essays and would recommend it to geomorphologists and biogeographers and others with interest

in environmental change in drylands, as well as to university libraries.

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DESERTIFICATION: EXPLODING THE MYTH by David S. G. Thomas and Nicholas J. Middleton, Wiley Chichester, 1994. No. of pages: xiii + 194. Price: £32.00. ISBN 0-471-94815-2.

This is a very timely book on a topic that needed a second evaluation. The book contains a prologue, nine chapters and an epilogue. In the prologue, the authors make it clear that their aim is to elucidate and demystify desertification by tracing the various political, social and scientific studies.

In the prologue, four propositions are outlined: (a) that according to the United Nations, one third of the world is affected by desertification and land degradation; (b) that drylands are fragile ecosystems and thus prone to desertification and degradation; (c) that desertification is the primary cause of human misery in drylands; and (d) that the United Nations is central in understanding and solving global desertification and degradation. The nine chapters following the prologue address the above four issues and a final summary is given.

Chapter two, the history of desertification, provides an excellent overview of the events that led to the convening in Nairobi, Kenya, in 1977 of the *UN Conference on Desertification* and the unveiling of the UNPACD (Plan of Action) to combat desertification and to control it by the year 2000. The narrative in this chapter takes the reader through such watershed events as the 1930s Dust Bowl of the Great Plains in the United States and the Sahelian droughts of the 1970s.

Chapter three examines the role of the United Nations, particularly the United Nations Environmental Programme (UNEP), in shaping desertification into a major world issue and bureaucratizing and eventually creating its own unique framework for understanding and mitigating global land degradation. In chapter four, UNEP's anti-desertification agenda is analysed. It is incredible to realize that the whole agenda was based on poor and sketchy scientific data leading ultimately to the ominous notion of the 'advancing desert'. Small-scale anti-desertification schemes were generally put aside in favour of big programmes, primarily as a means to attract more funding and to advance certain political and social agendas.

Chapter five discusses the primary causes of desertification. What emerges is that people are the primary agents causing desertification, especially when well

established, traditional land-use systems are destroyed or changed in order to participate in the global economy. Chapter six discusses why desertification occurs. The primary candidates include poor understanding of the dryland physical environment, inadequate planning, and the exclusion of the local dryland inhabitants from the decision-making process.

Chapters seven to nine unravel the desertification myth. It is clear that human-induced degradation needs to be separated from natural variations in the biophysical system (climate, soils, vegetation, geomorphology). Future scientific investigations should concentrate on such important issues as the long-term monitoring of dryland environments, and the question of population increase in developing countries and its impact on land degradation. Also, small-scale development projects should be encouraged and implemented owing to the fact that money from large-scale projects is typically spent on covering the expenses of consultants and experts, and that very little money actually permeates to the local community (average cost of a new project in 1989 was around \$400,000!).

In summarizing, the authors look at the evidence presented in the first nine chapters and arrive at the following conclusions: (a) the global extent of desertification seems to be grossly exaggerated and primarily based on marginal scientific data; (b) dryland ecosystems are adapted to environmental stresses and often appear to exhibit good recovery characteristics; (c) desertification and drought have been used as scapegoats to mask more serious causes, including political ineptitudes, and poorly and hastily planned economic systems for short-term fixes to curb social malaise; and (d) the UN created desertification with its institutional myth and bureaucracy and seems intent on maintaining it under its auspices.

This is a controversial book which will probably cause raised eyebrows and make certain people and institutions rather nervous. It is lucid, well written and well organized, with ample documentation, and should make excellent reading for all geoscientists, politicians, economists and others conducting work in the environmental sciences.

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